

FIG. 1a

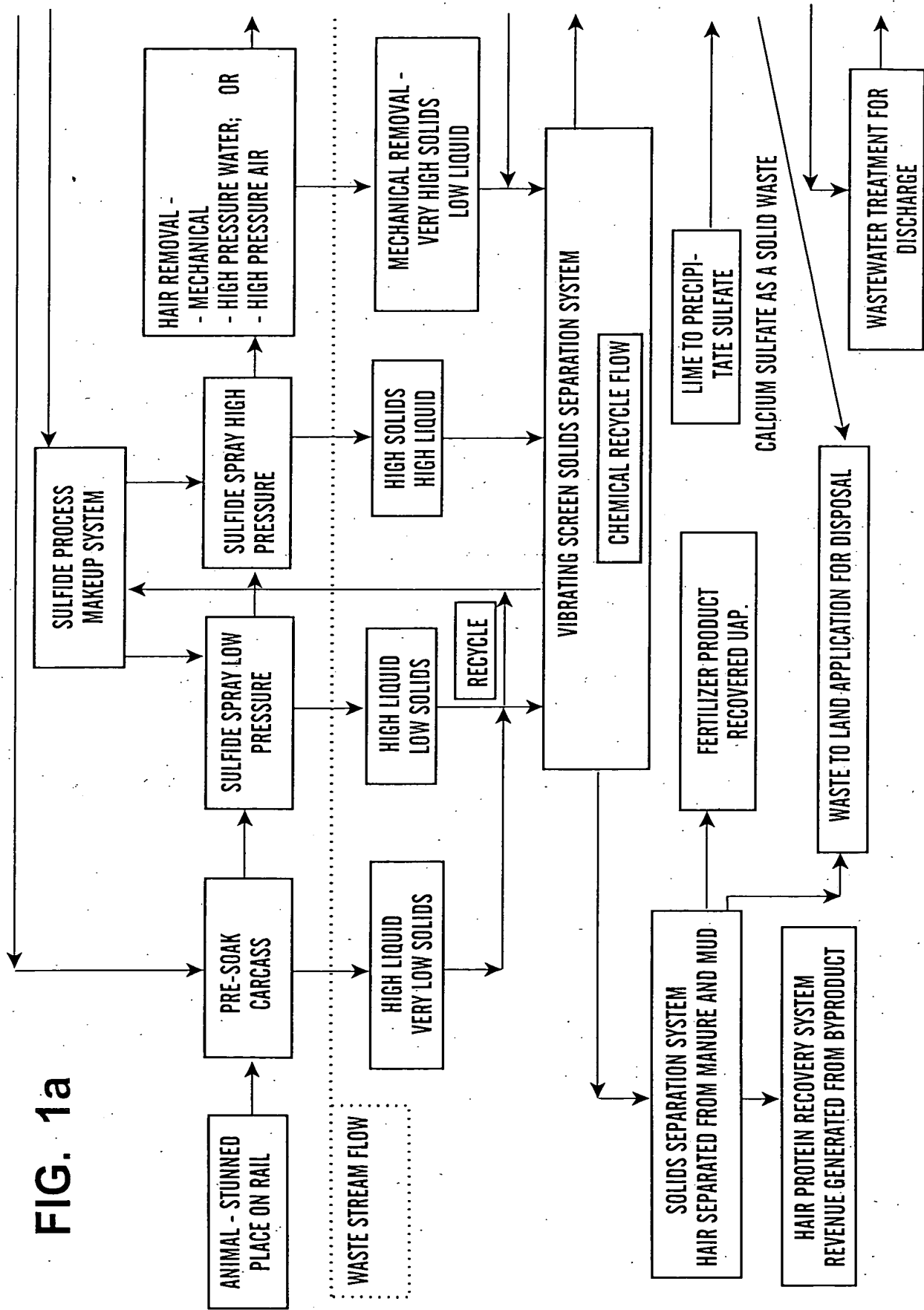


FIG. 1b

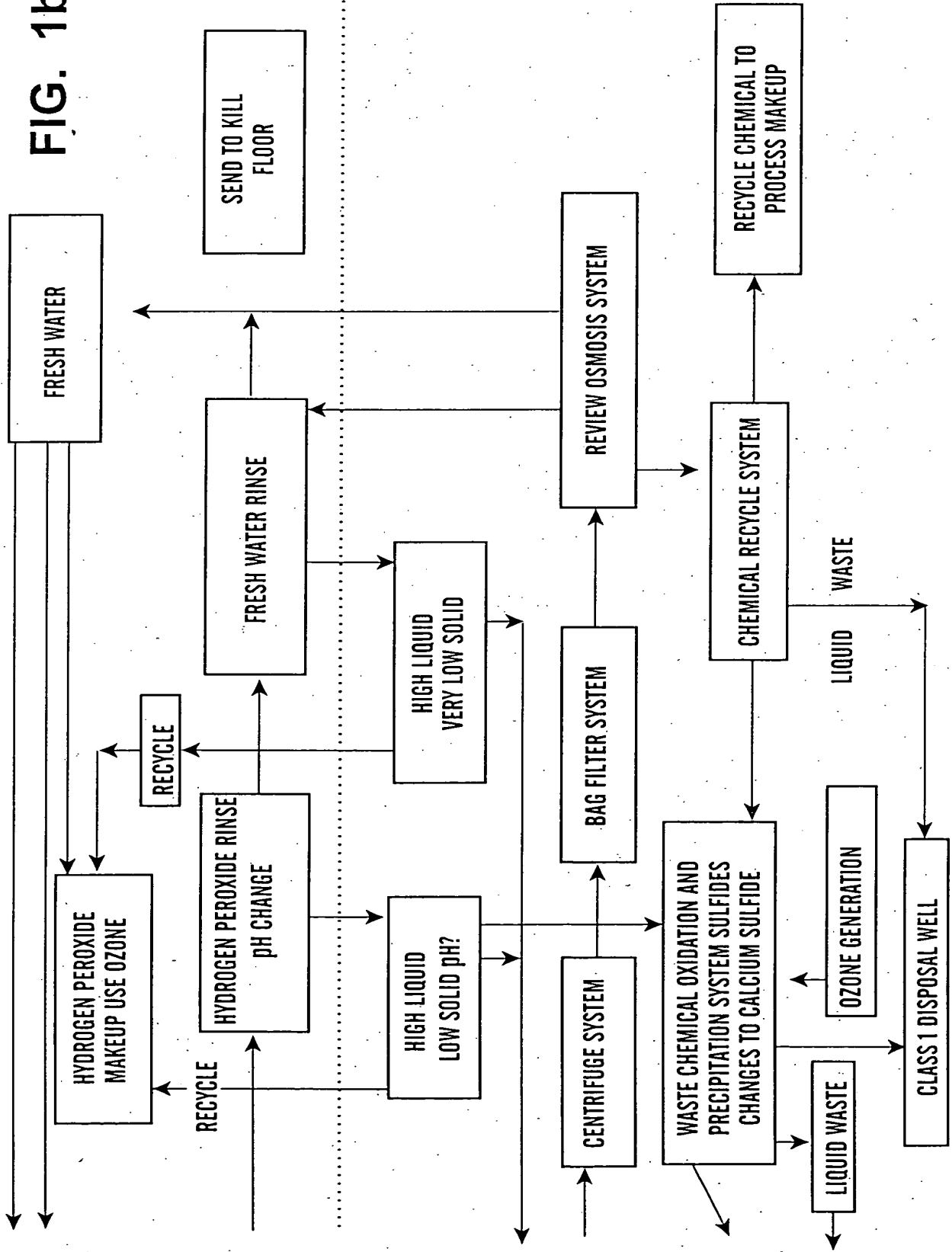


FIG. 2a

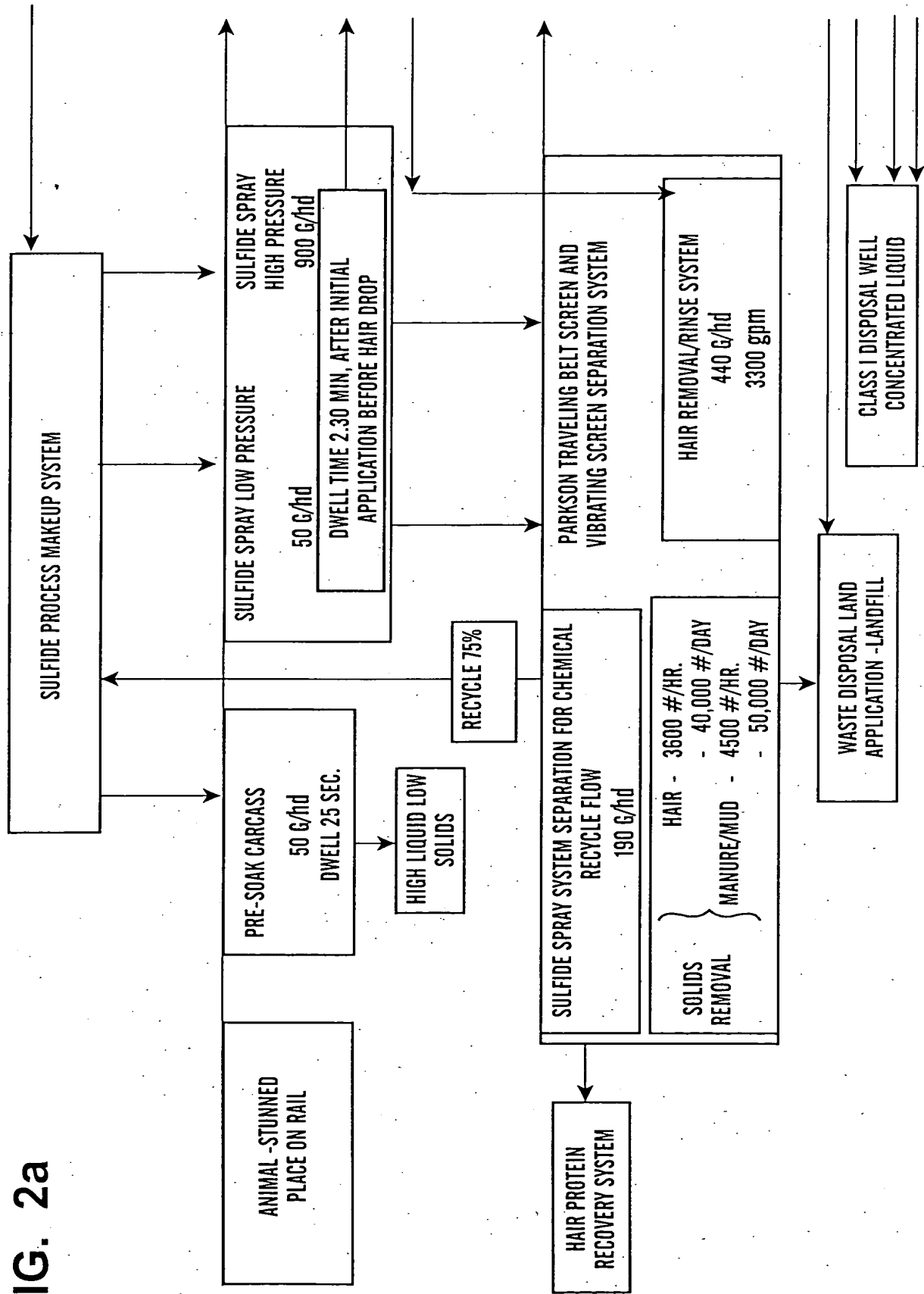


FIG. 2b

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graph TD
    FWWS[FRESH WATER STORAGE] --> PHA[PH ADJUSTMENT AND FRESH WATER WASH OF CARCASS  
CARBOLIC ACID WATER <--> FFWW[FRESH WATER WASH  
300 G/hd  
DWELL TIME 20 TO 40 SEC.]
    PHA --> R[RINSE  
40 G/hd]
    PHA --> FFWW
    R --> FFWW
    FFWW --> FWR[FRESH WATER RECYCLE SYSTEM  
300 G/hd]
    FWR --> F70[RECYCLE 70%  
308 G/hd  
2310 gpm  
1,540,000 gpd]
    F70 --> FWS[FRESH WATER STORAGE]
    F70 --> ROS[REVERSE OSMOSIS SYSTEM  
TWO PHASE SYSTEM  
440 G/hd  
3300 gpm  
2,200,000 gpd]
    ROS --> B[RECYCLE 70%  
308 G/hd  
2310 gpm  
1,540,000 gpd]
    ROS --> FWS
    ROS --> BFS[BAG-FILTER SYSTEM  
440 G/hd  
3300 gpm]
    ROS --> CFS[CENTRIFUGE SYSTEM  
440 G/hd  
3300 gpm]
    ROS --> WCO[WASTE CHEMICAL  
OXIDATION AND  
PRECIPITATION]
    ROS --> CRS[CHEMICAL RECYCLING SYSTEM  
39,110 #/DAY  
660,000 gpd]
    ROS --> S[SEND TO KILL FLOOR]
```

The flowchart illustrates a wastewater treatment system for carcass washing and recycling. The process begins with **FRESH WATER STORAGE**, which feeds into a **PH ADJUSTMENT AND FRESH WATER WASH OF CARCASS** unit. This unit has two internal flows: **CARBOLIC ACID WATER** and **FRESH WATER WASH** (300 G/hd). The **FRESH WATER WASH** flow continues to a **RINSE** unit (40 G/hd) and then to a **FRESH WATER RECYCLE SYSTEM** (300 G/hd). The **RINSE** unit also feeds into the **FRESH WATER RECYCLE SYSTEM**. The **FRESH WATER RECYCLE SYSTEM** outputs **RECYCLE 70%** (308 G/hd, 2310 gpm, 1,540,000 gpd) back to **FRESH WATER STORAGE** and also feeds into a **REVERSE OSMOSIS SYSTEM TWO PHASE SYSTEM** (440 G/hd, 3300 gpm, 2,200,000 gpd). The **REVERSE OSMOSIS SYSTEM** outputs **RECYCLE 70%** (308 G/hd, 2310 gpm, 1,540,000 gpd) back to **FRESH WATER STORAGE** and also feeds into a **BAG-FILTER SYSTEM** (440 G/hd, 3300 gpm), a **CENTRIFUGE SYSTEM** (440 G/hd, 3300 gpm), a **WASTE CHEMICAL OXIDATION AND PRECIPITATION** unit, a **CHEMICAL RECYCLING SYSTEM** (39,110 #/DAY, 660,000 gpd), and a **SEND TO KILL FLOOR** unit. The **WASTE CHEMICAL OXIDATION AND PRECIPITATION** unit also feeds into the **CHEMICAL RECYCLING SYSTEM**.

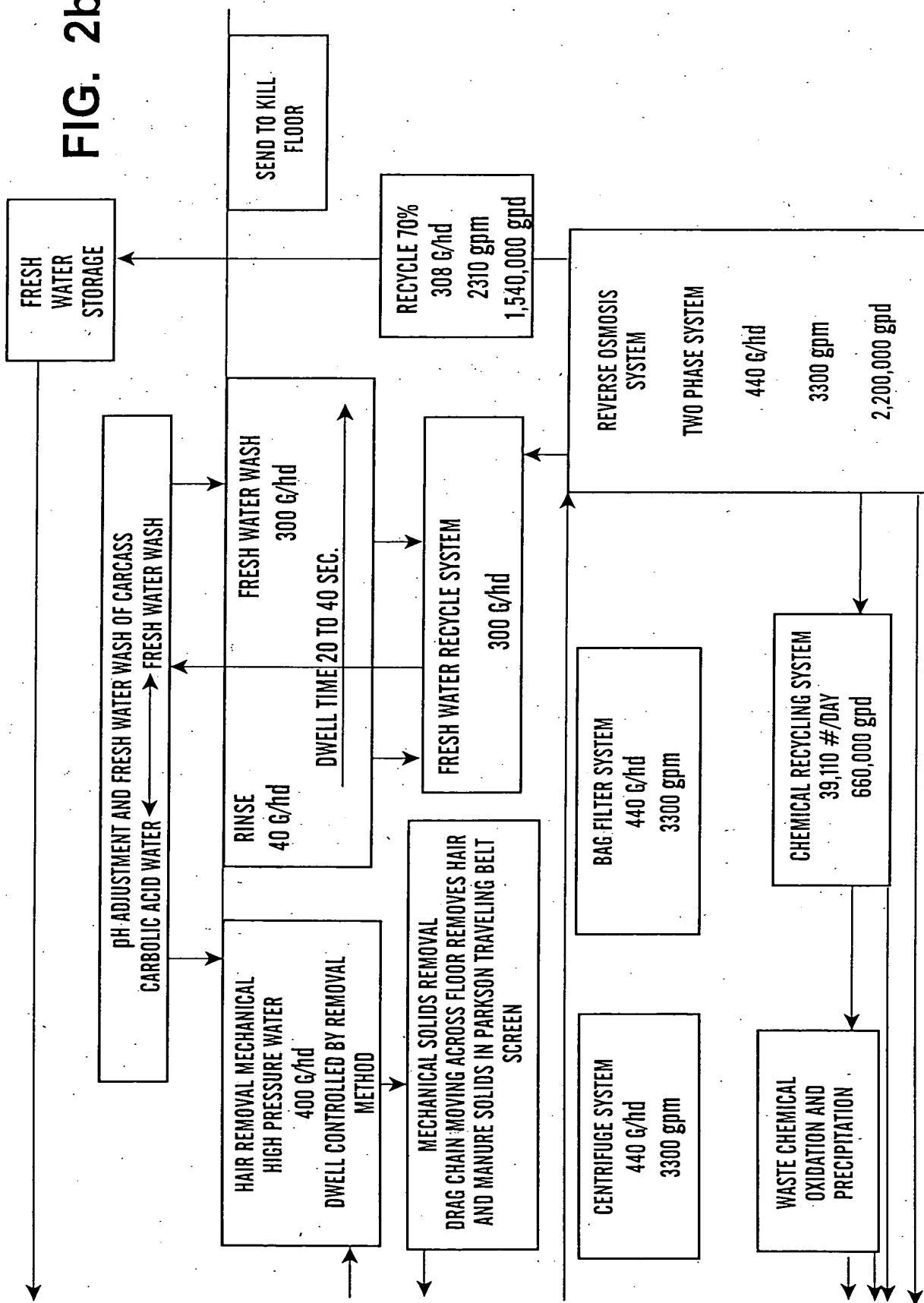


FIG. 3a

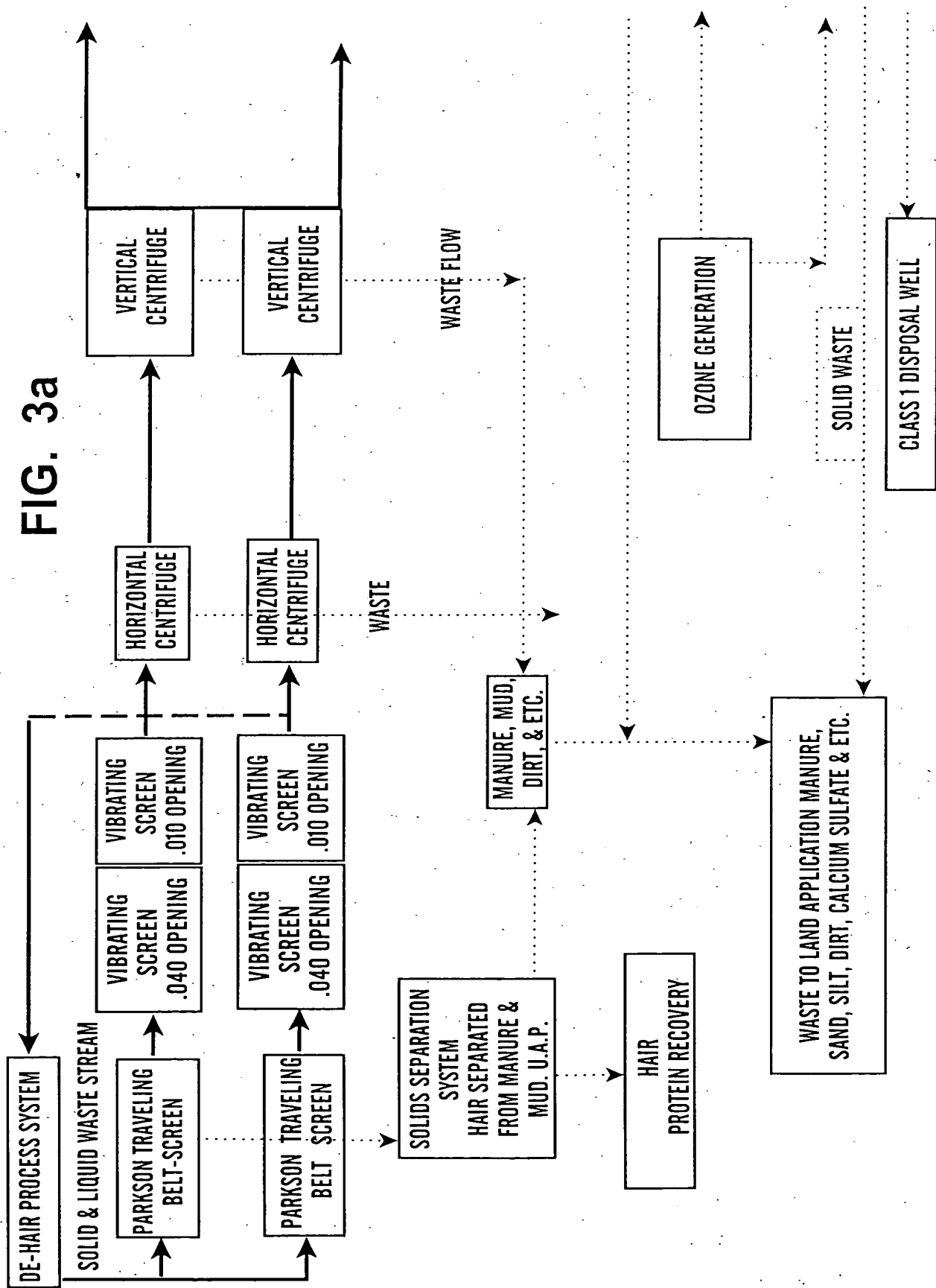
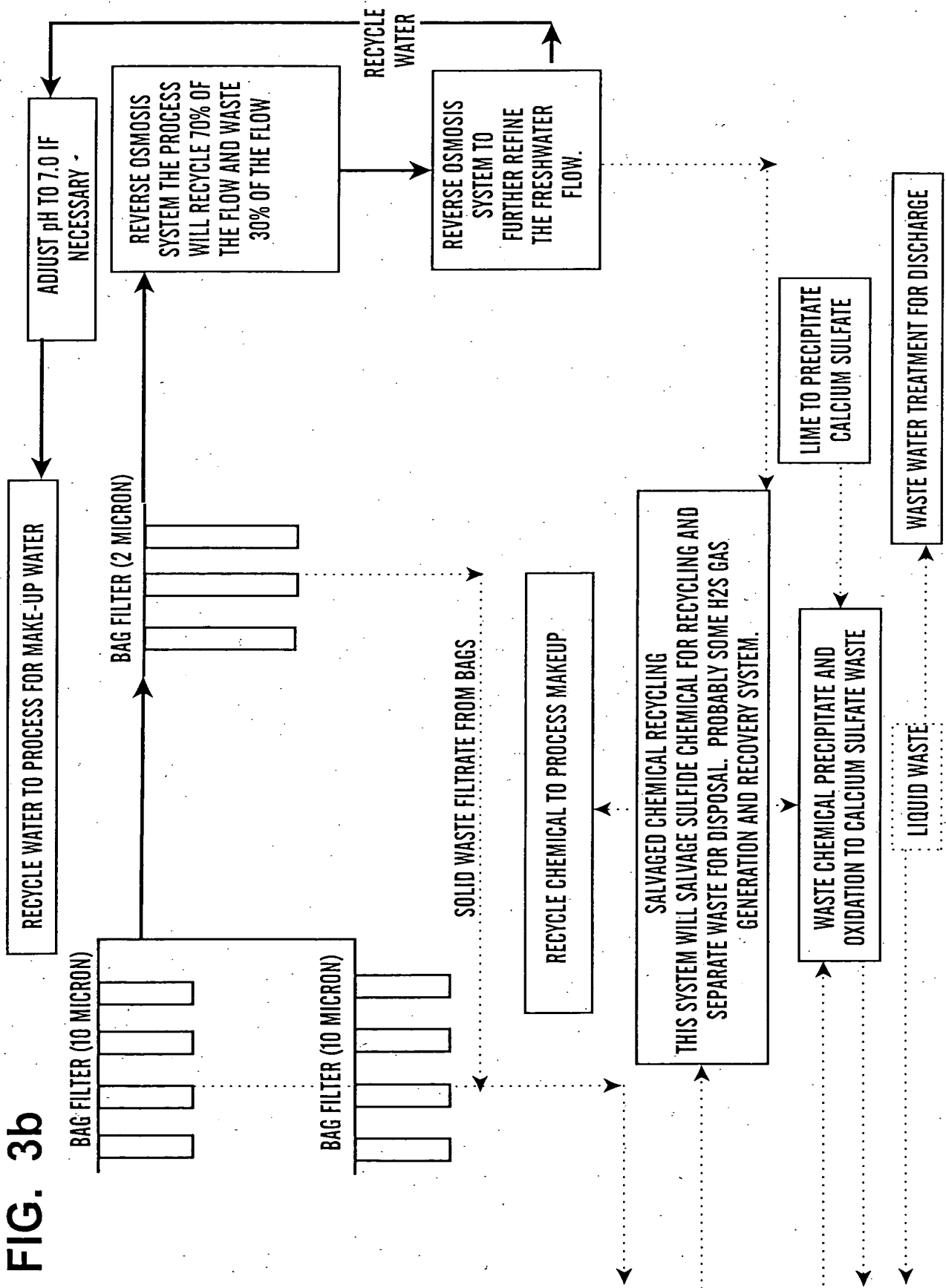


FIG. 3b



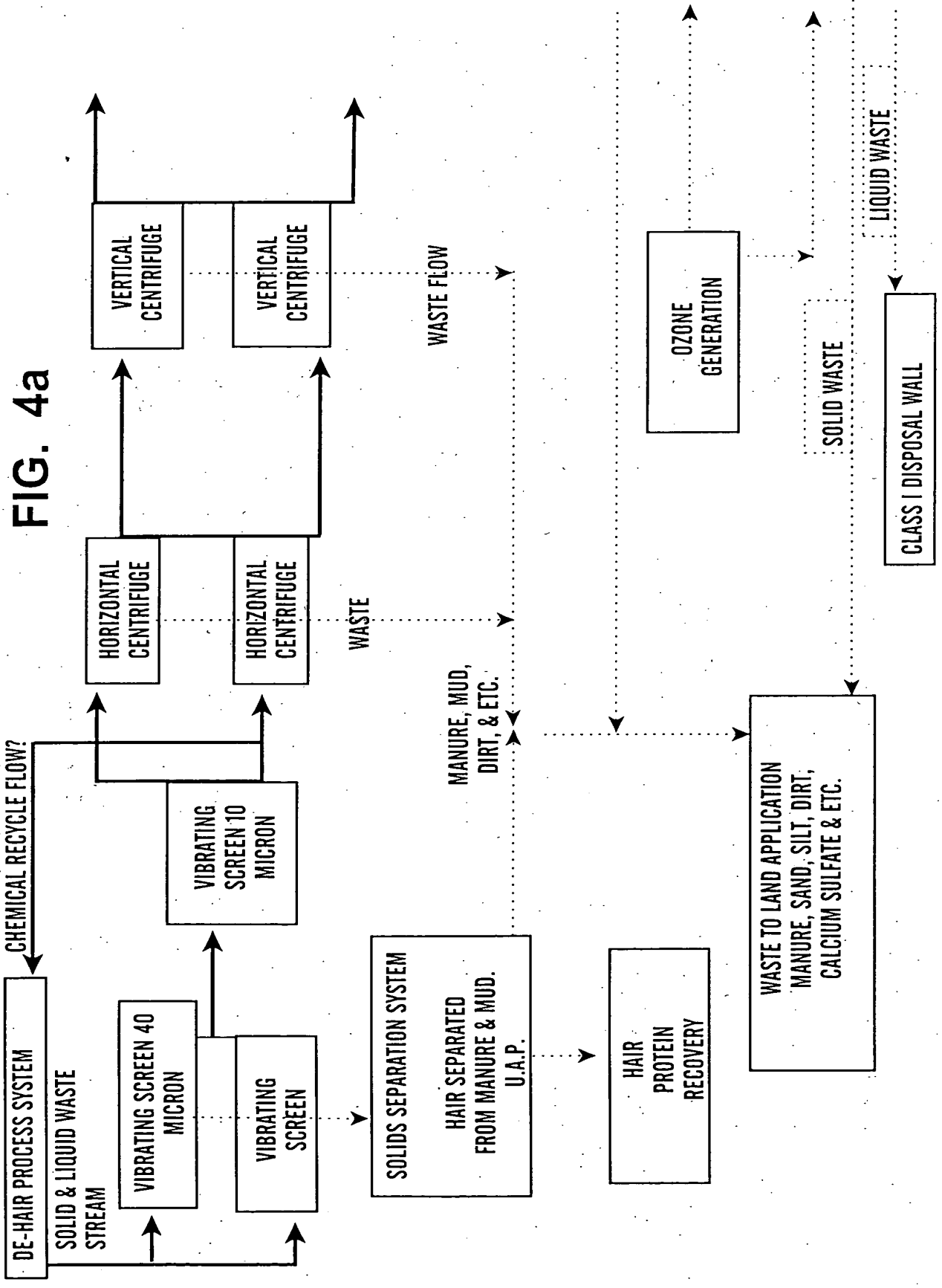


FIG. 4b

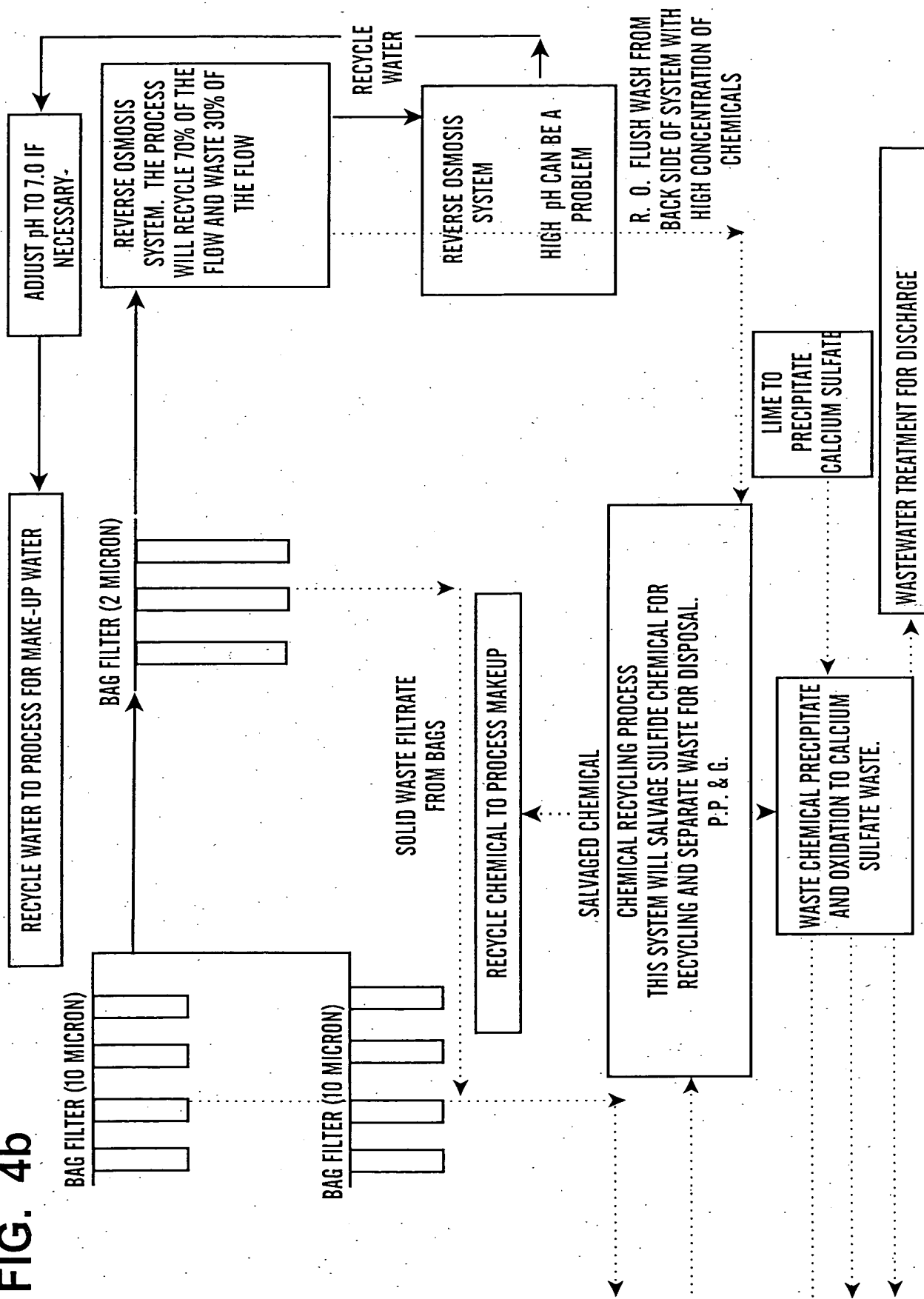


FIG. 5a

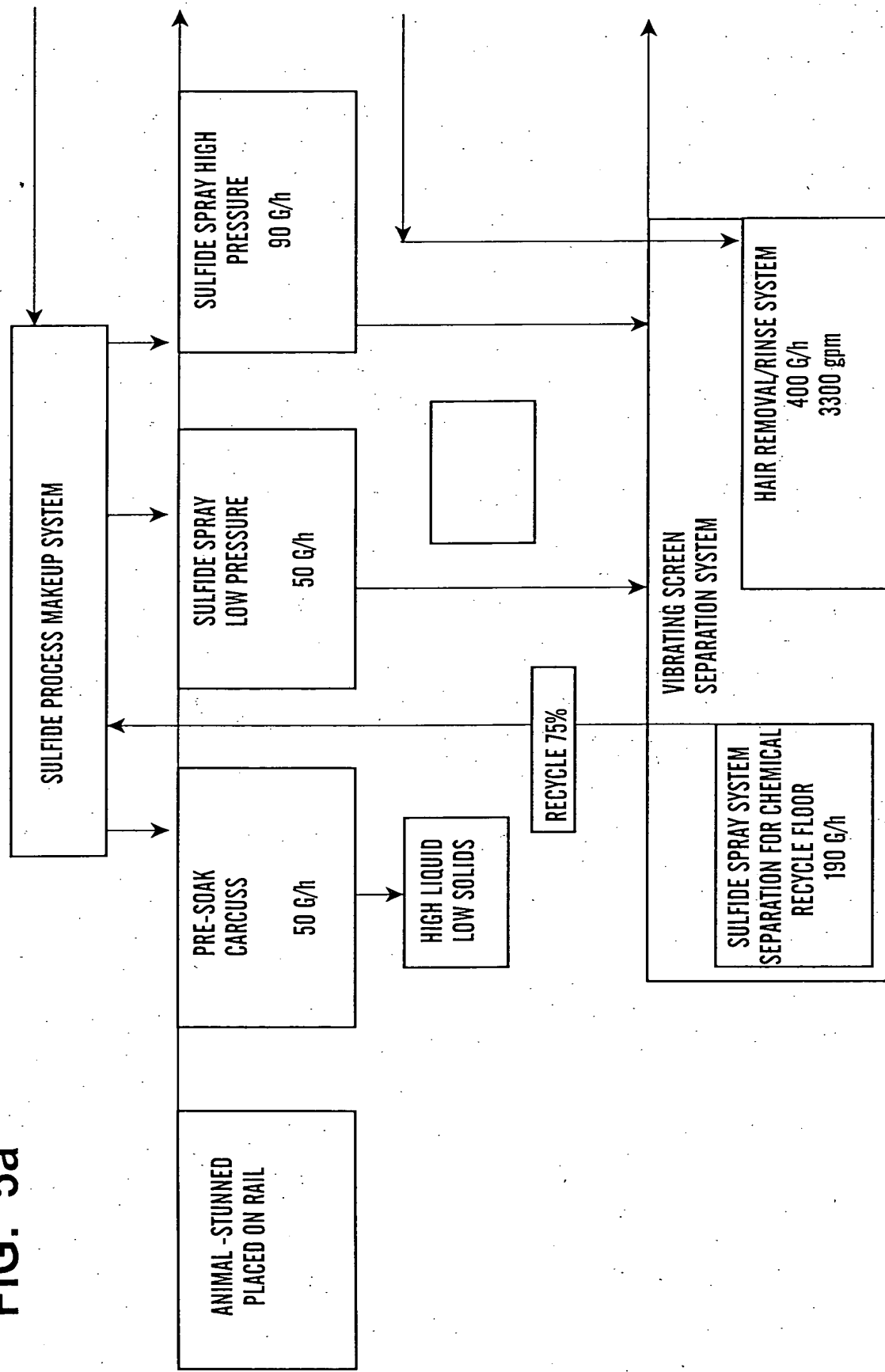
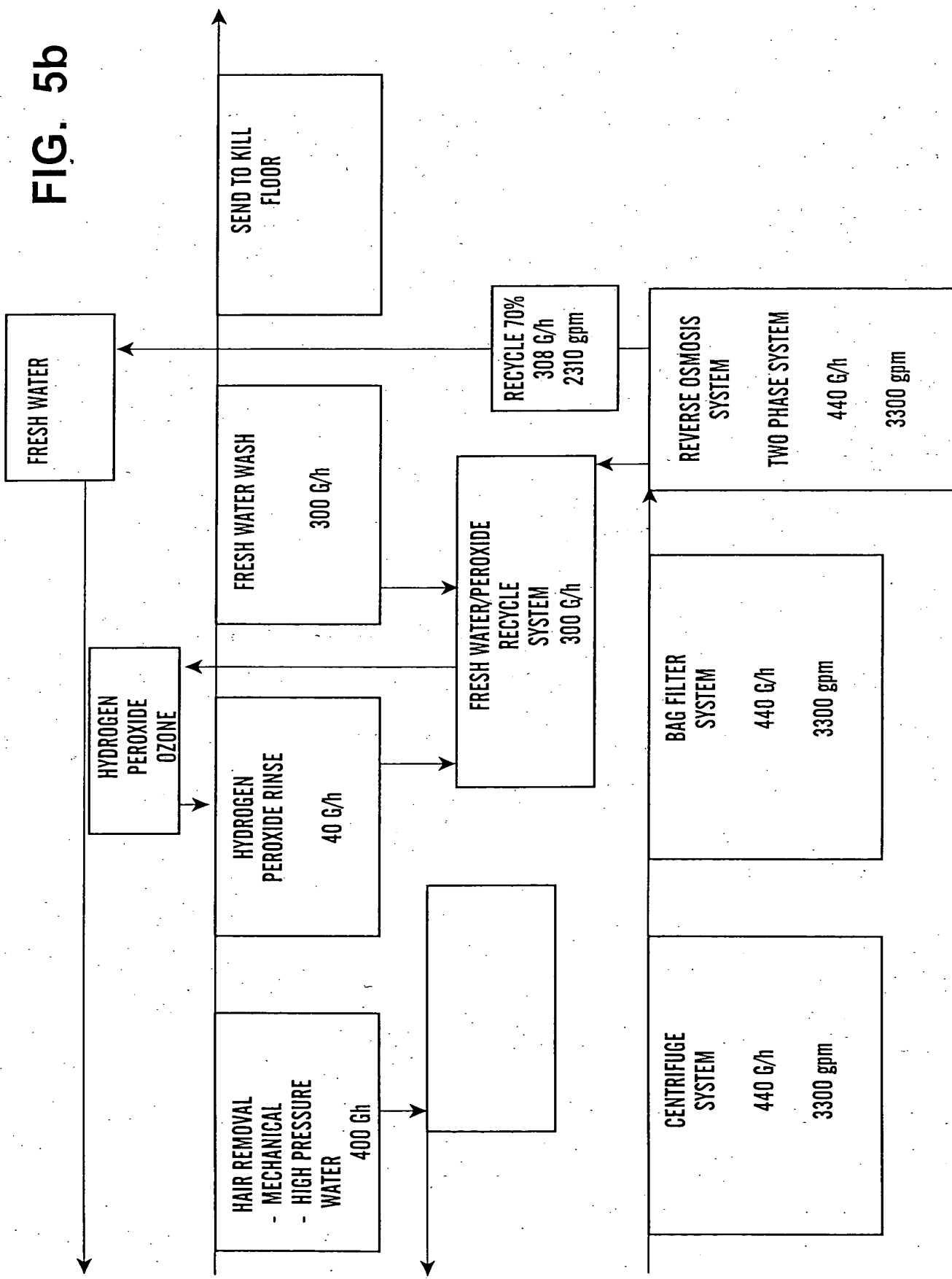


FIG. 5b



CHEMICAL RECYCLE PROCESS

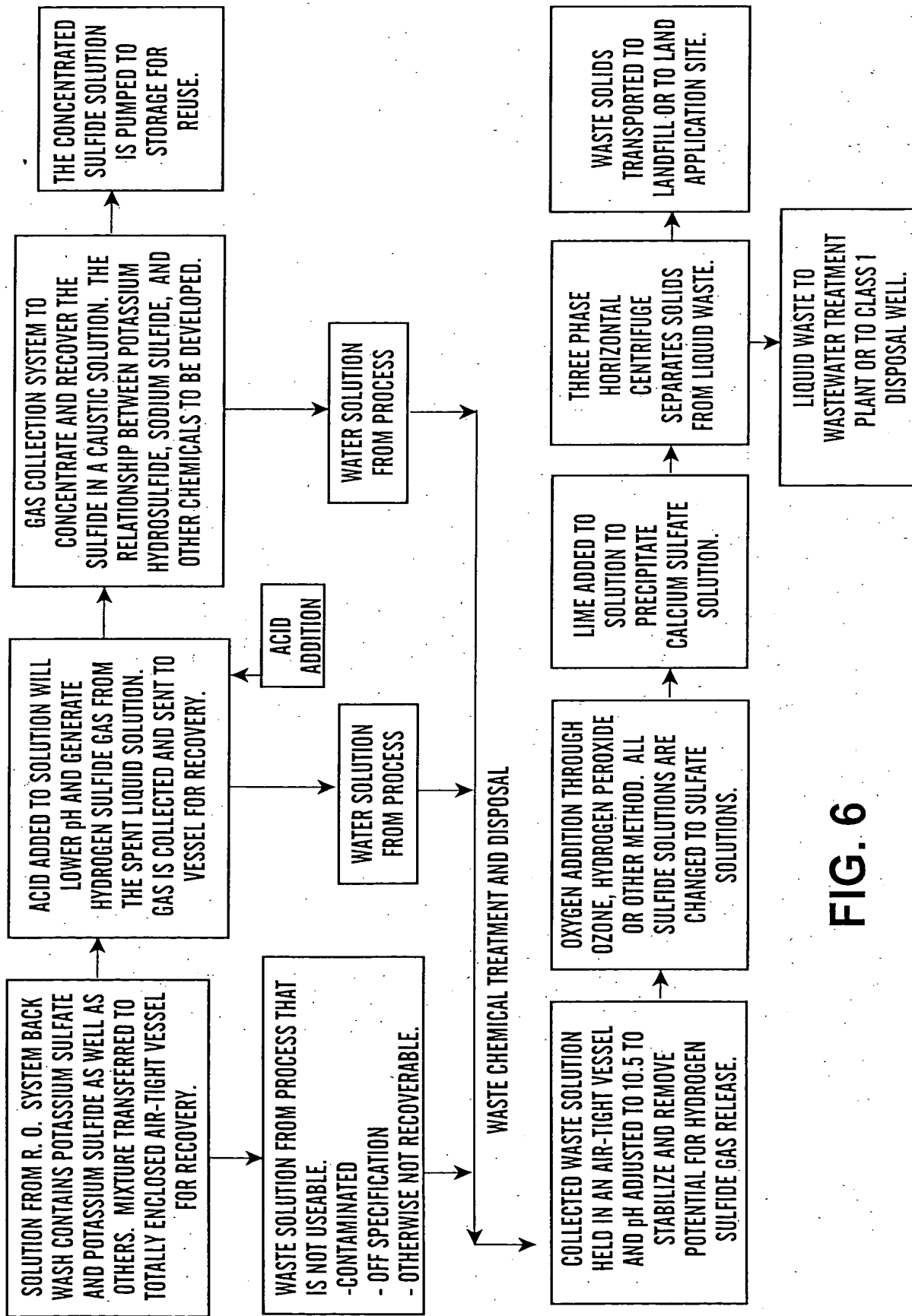


FIG. 6

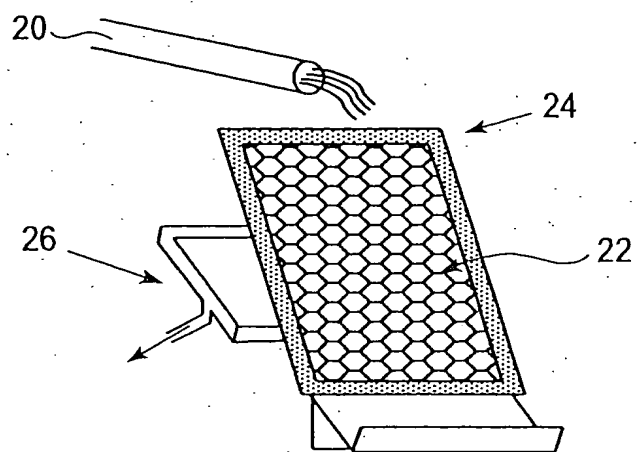


FIG. 7a

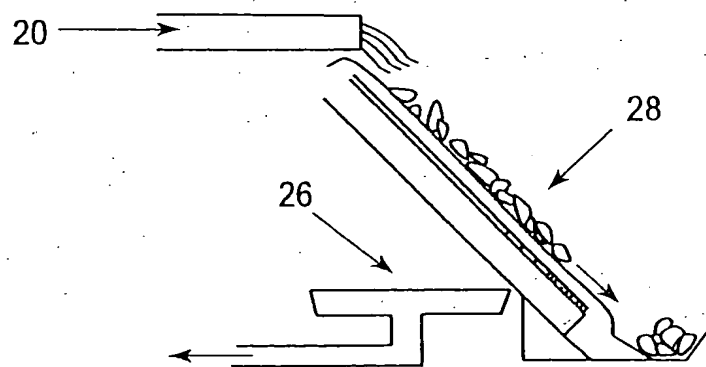


FIG. 7b

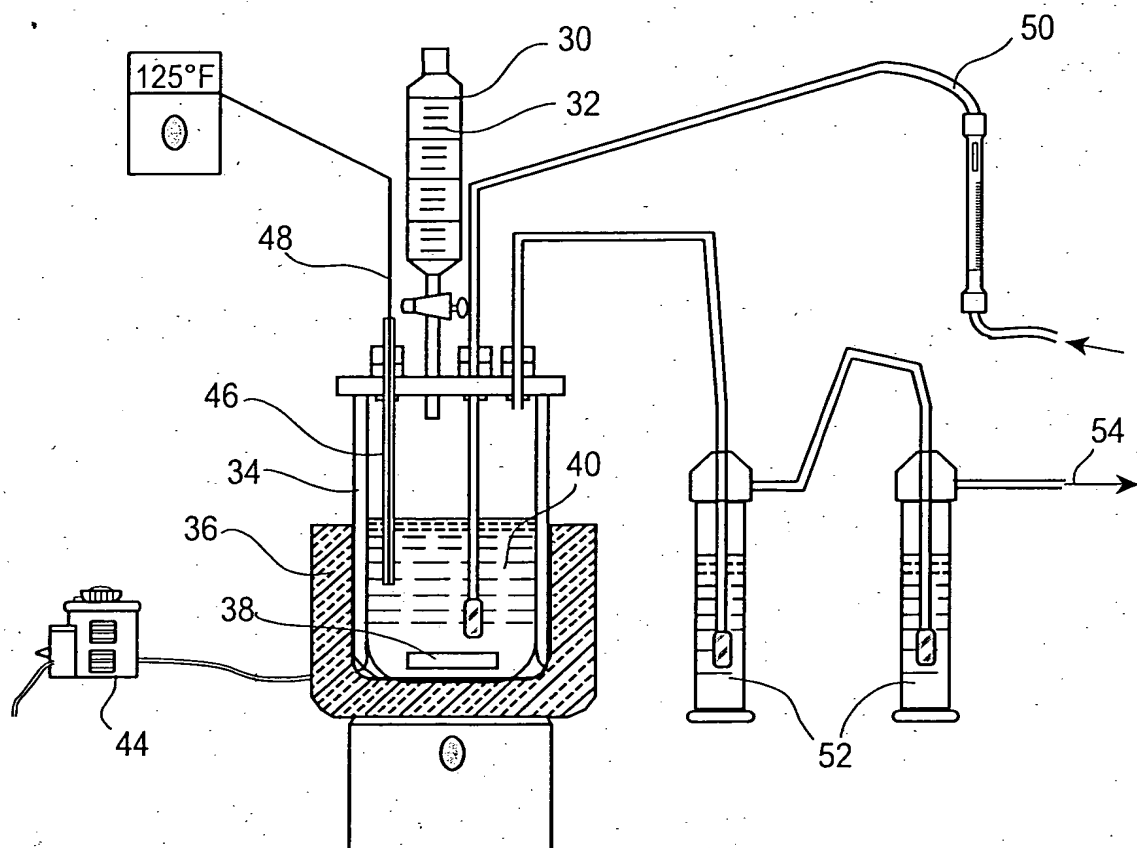


FIG. 8

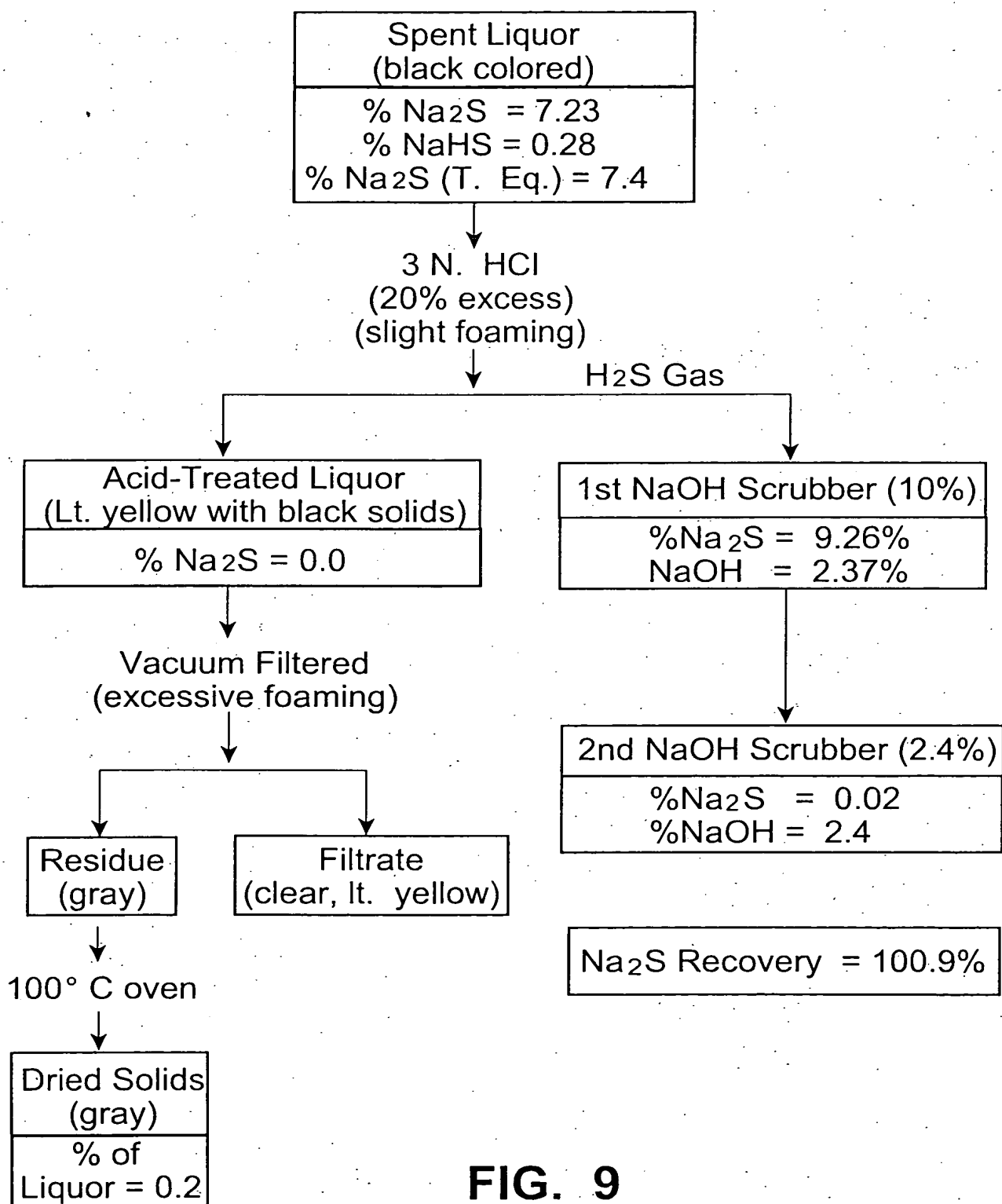


FIG. 9

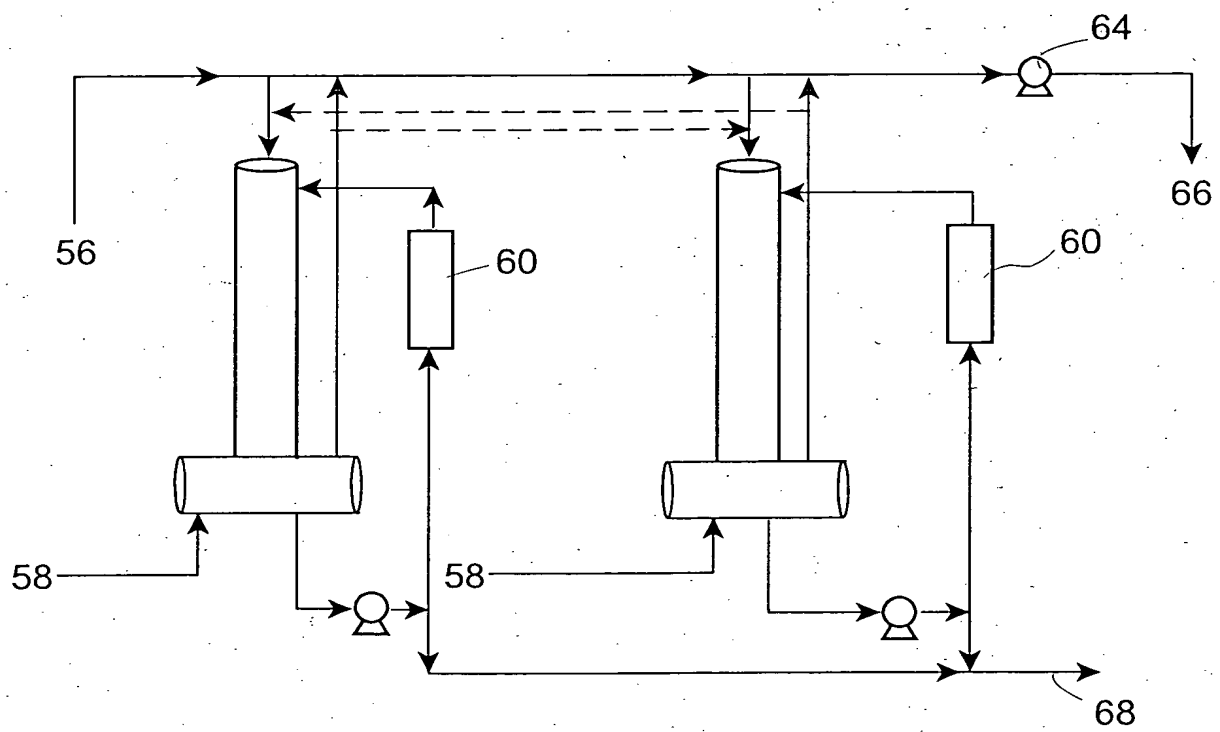


FIG. 10